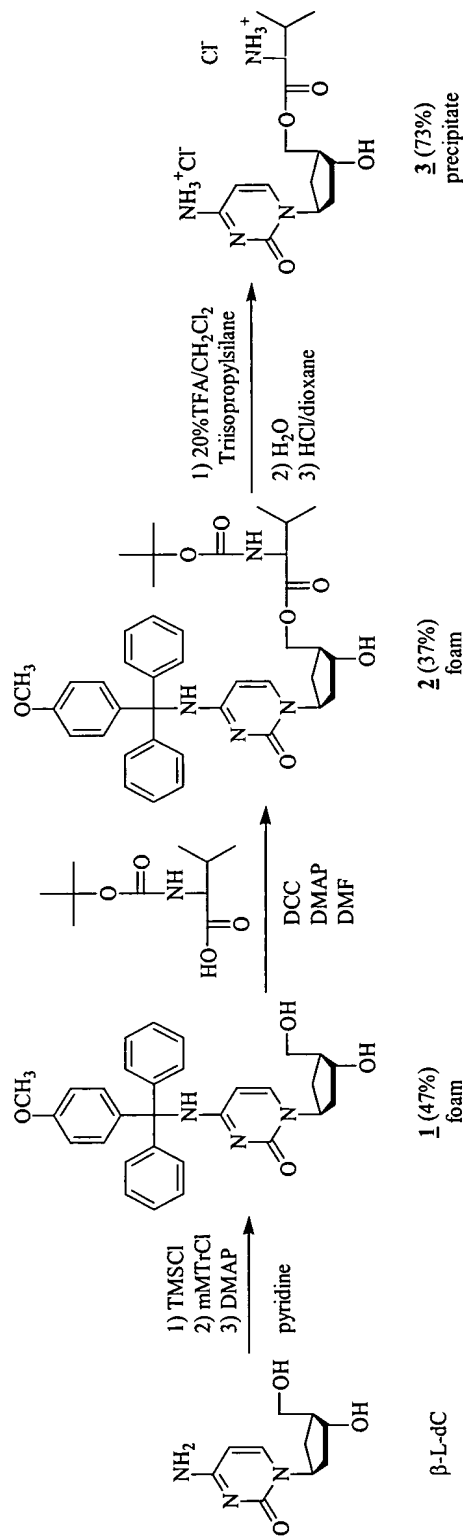
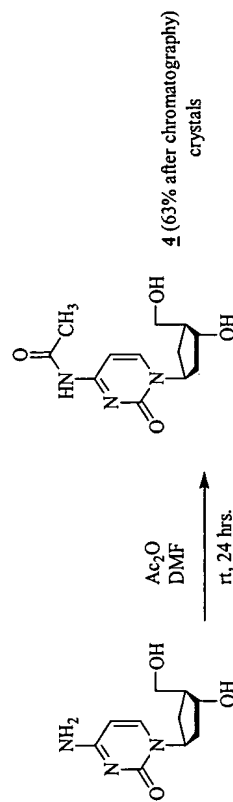


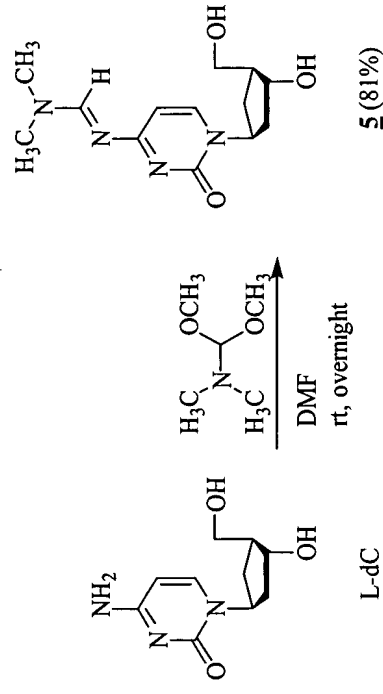
**Figure 1a:** Synthesis of 3'-valeryl esters of 2'-deoxy- $\beta$ -L-cytidine



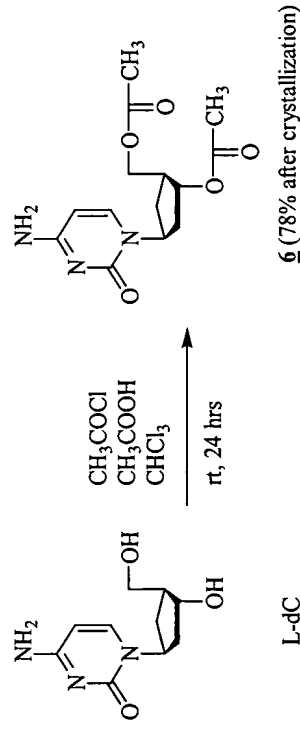
**Figure 1b:** Synthesis of 5'-valeryl esters of 2'-deoxy- $\beta$ -L-cytidine



**Figure 2:** Synthesis of  $N^4$ -acetyl-2'-deoxy- $\beta$ -L-cytidine



**Figure 3:** Synthesis of *N*'-[(dimethylamino)methylene]-2'-deoxy- $\beta$ -L-cytidine



**Figure 4:** Synthesis of 3',5'-di-*O*-acetyl-2'-deoxy- $\beta$ -L-cytidine

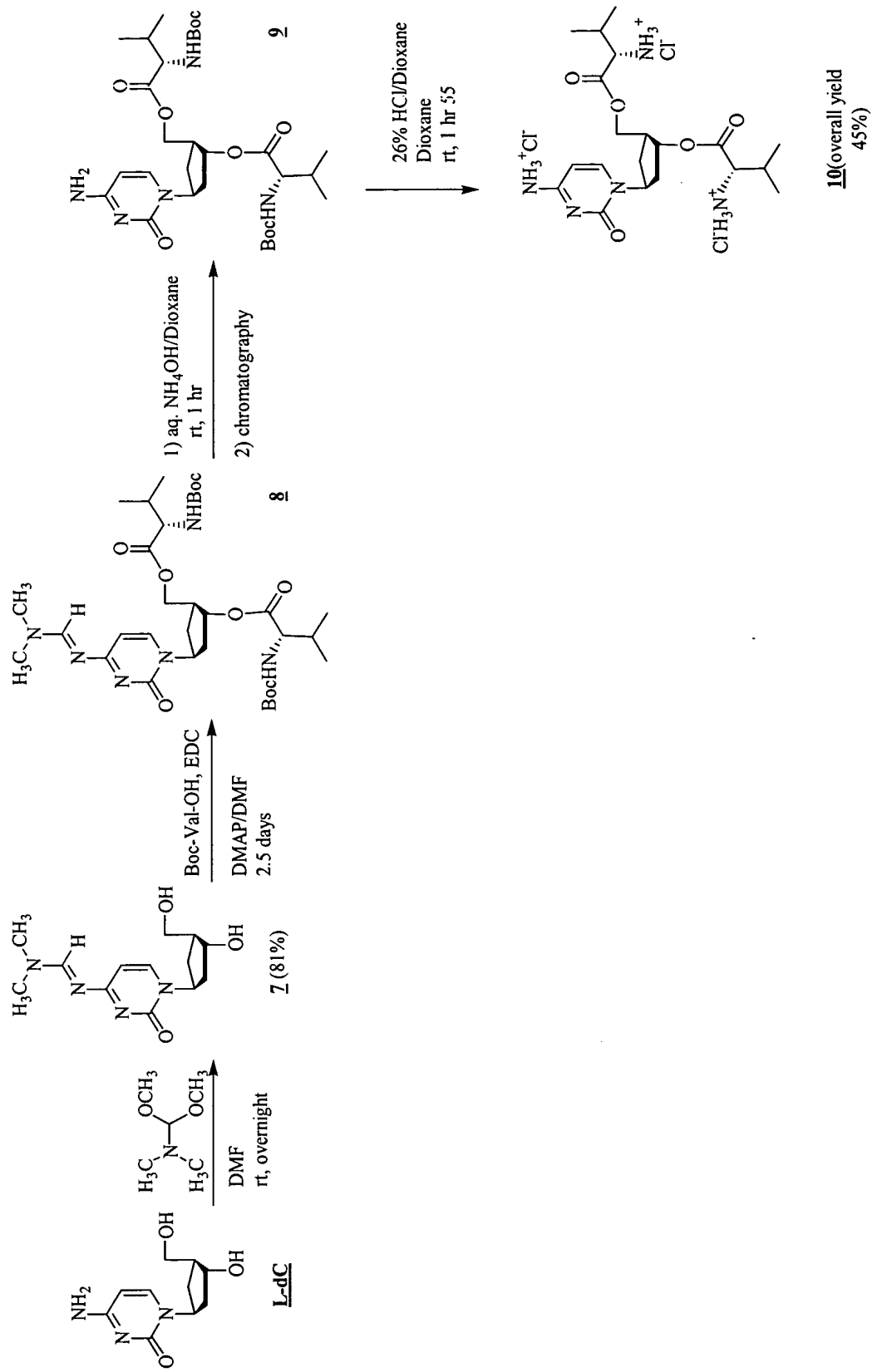
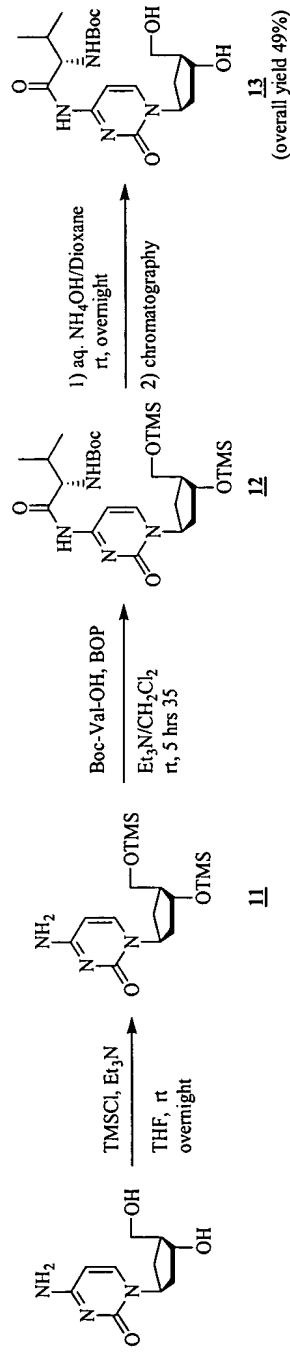
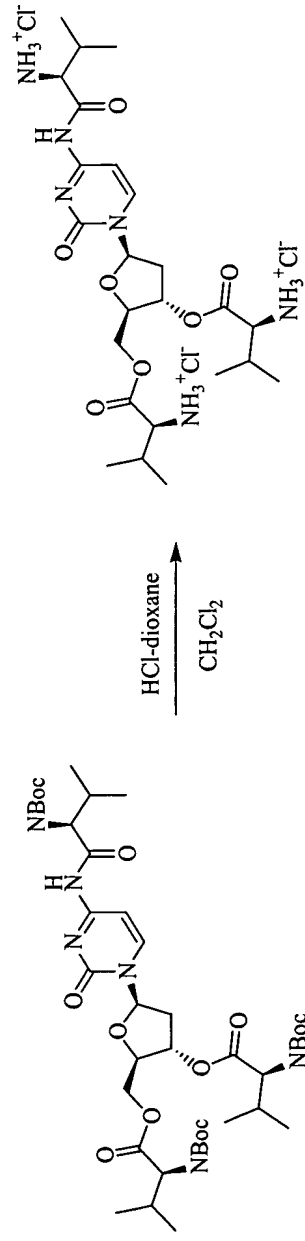


Figure 5: Synthesis of 3',5'-di-*O*-valinyl esters of 2'-deoxy  $\beta$ -L-cytidine



**Figure 6:** Synthesis of  $N^4$ -Boc-valinyl ester of 2'-deoxy- $\beta$ -L-cytidine



MW: 825.0

**14**  
MW: 634.0

**Figure 7:** Synthesis of 3',5', $N^4$ -tri-(L-valinyl)-L-2'-deoxycytidine

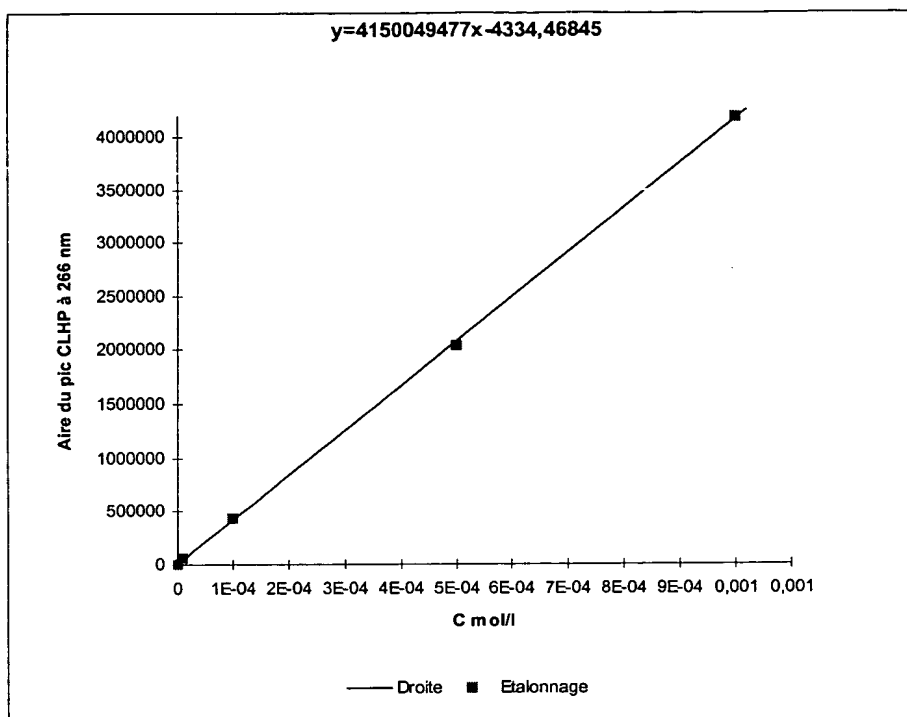


Figure 8a: Solubility Calibration Curve for D-dC

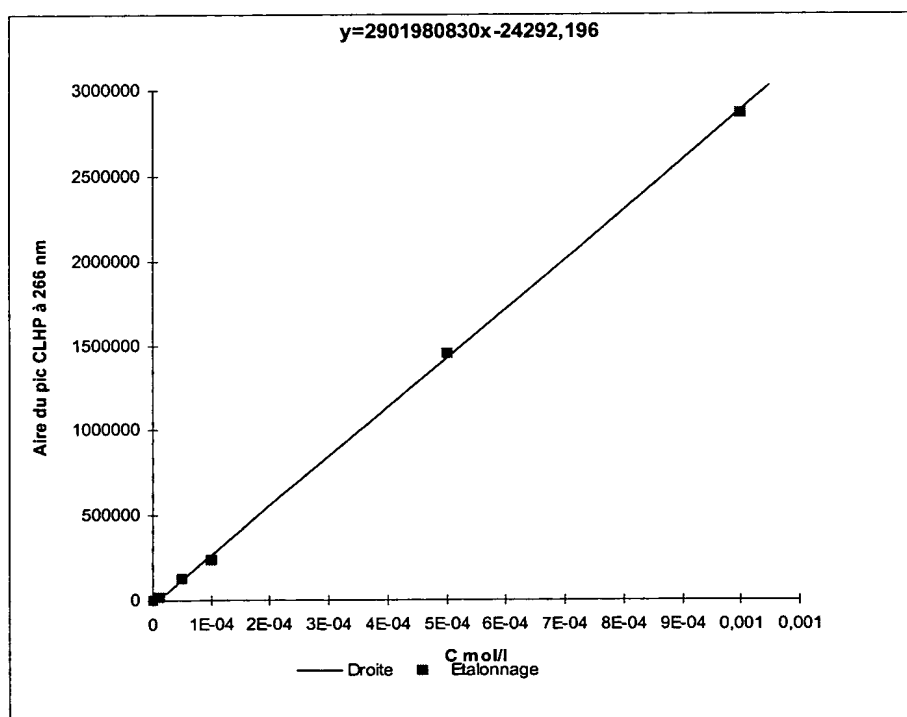


Figure 8b: Solubility Calibration Curve for the 3',5'-Divalinyl Ester of L-dC

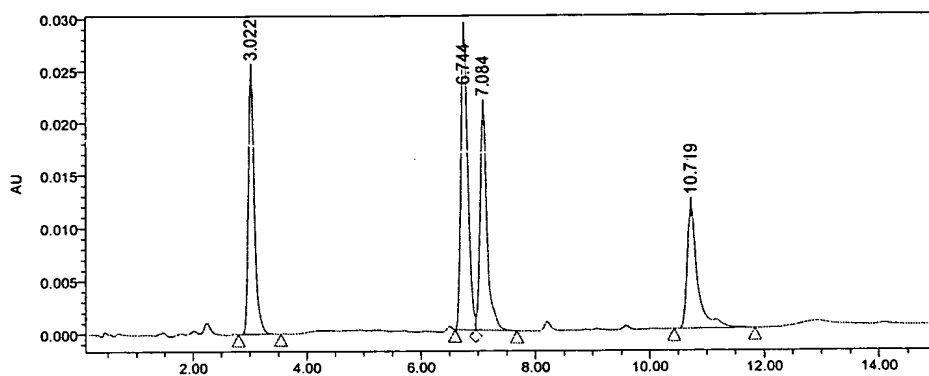


Figure 9a: HPLC profile – 7.5 hours at pH of 7.42

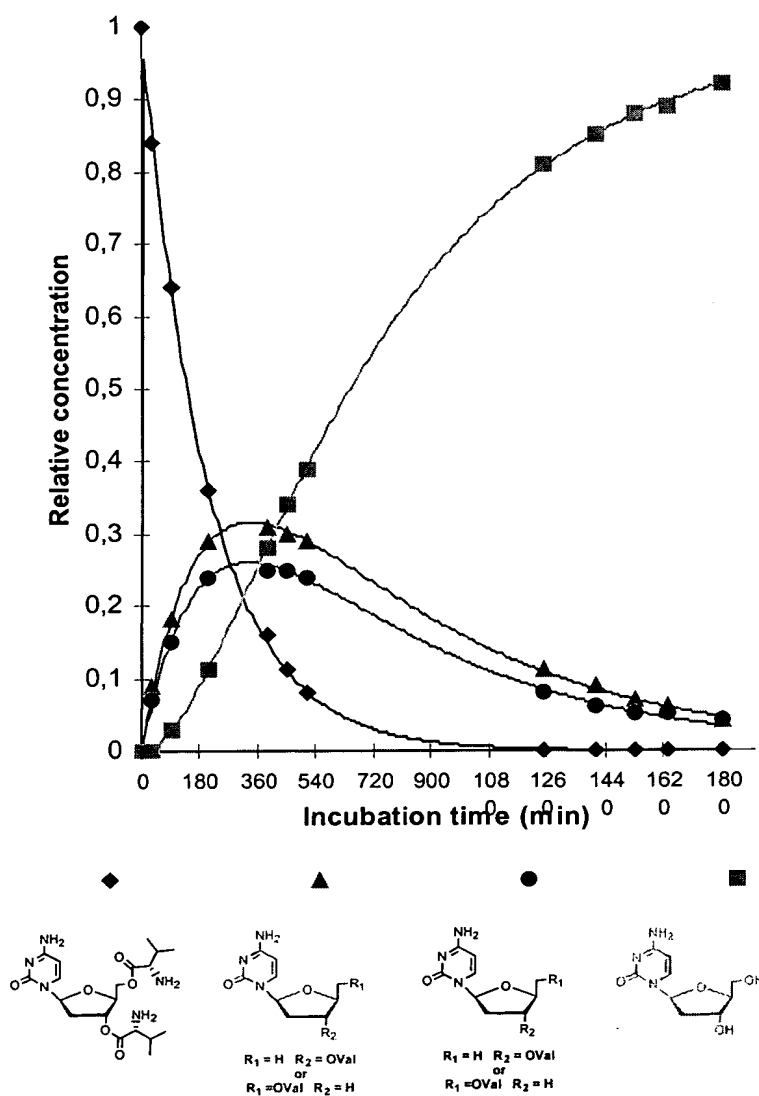


Figure 9b: Kinetics curves at pH of 7.42

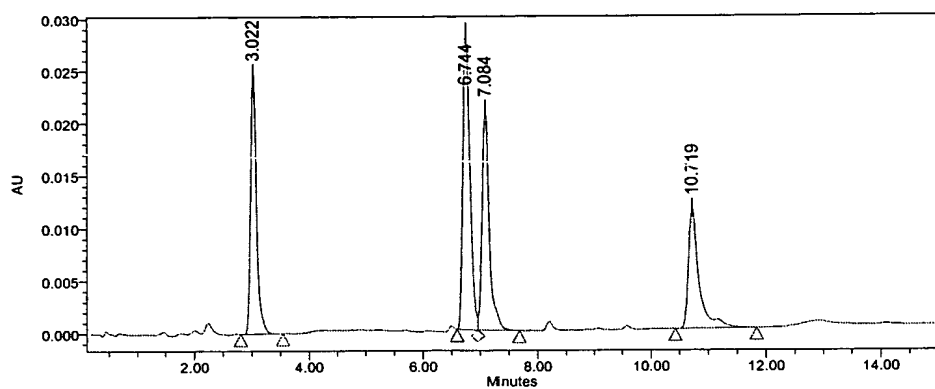


Figure 10a: HPLC profile – 5.33 hours at pH of 7.20

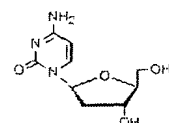
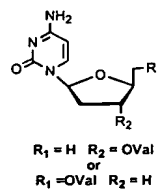
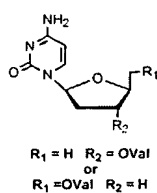
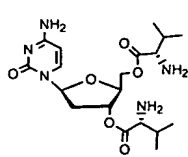
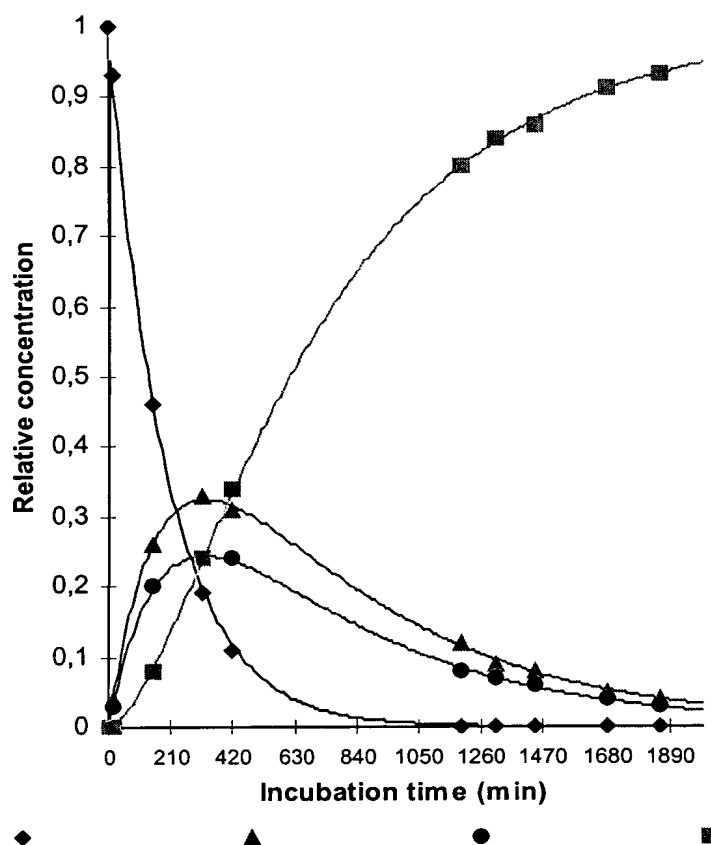


Figure 10b: Kinetics curves at pH of 7.20

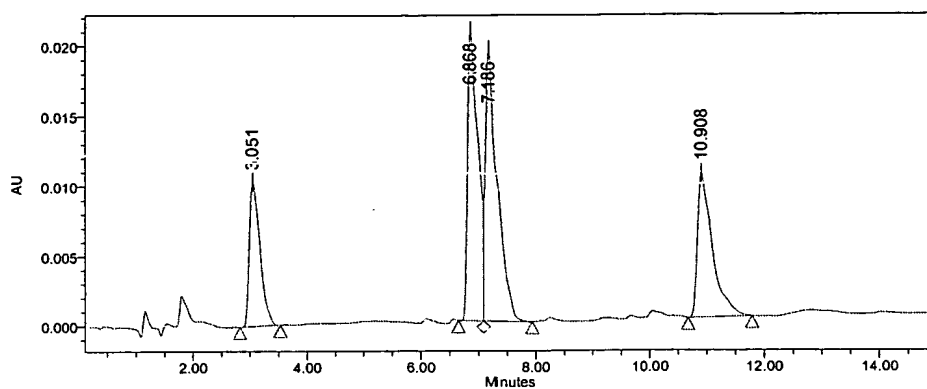


Figure 11a: HPLC profile – 95.7 hours at pH of 4.51

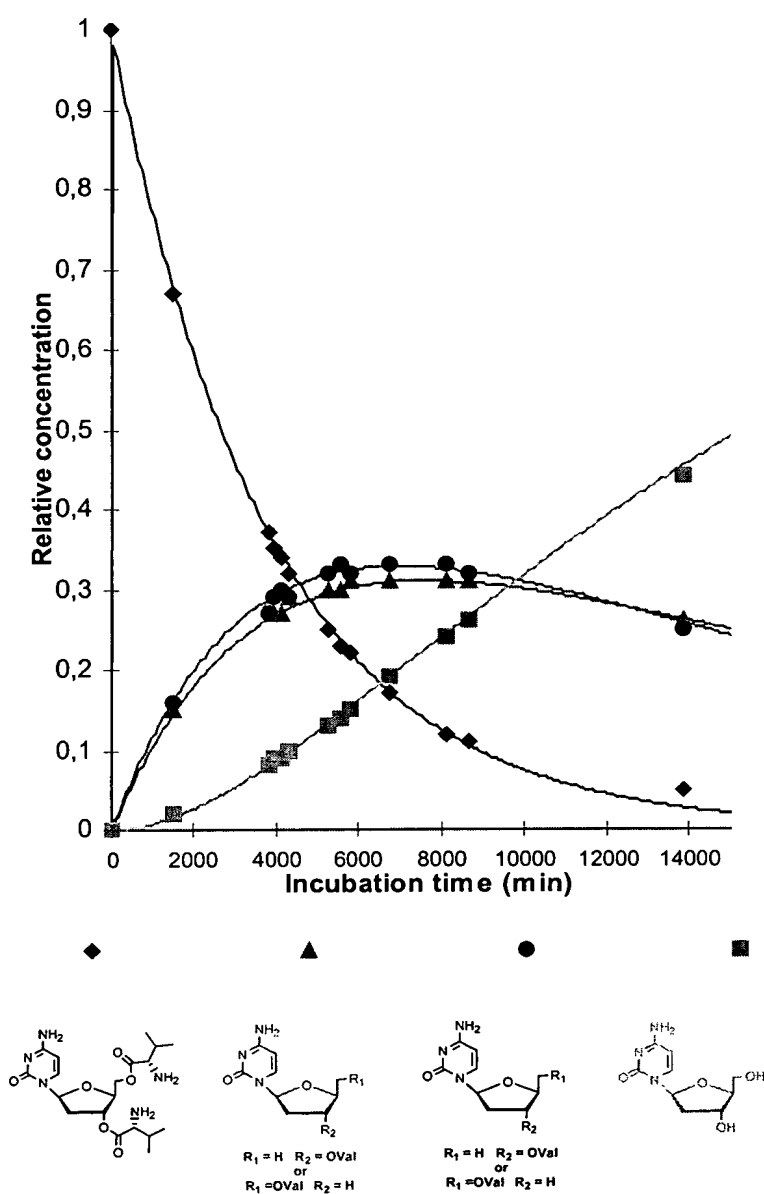


Figure 11b: Kinetics curves at pH of 4.51



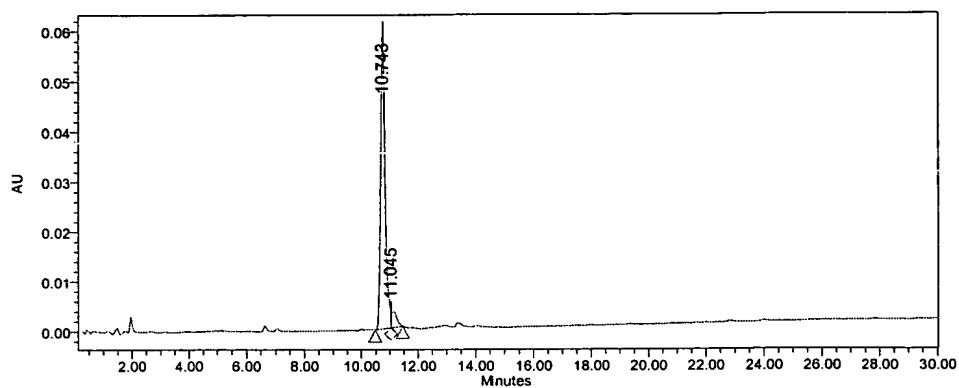


Figure 12: HPLC profile – 48 hours at pH of 1.23

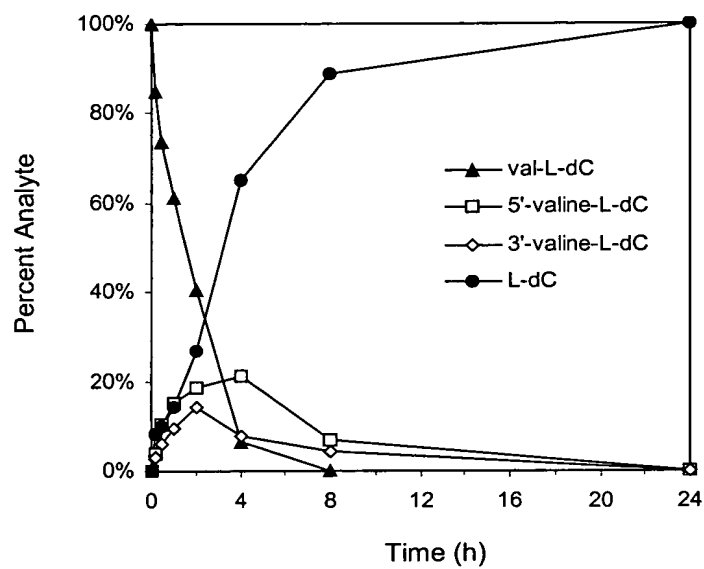
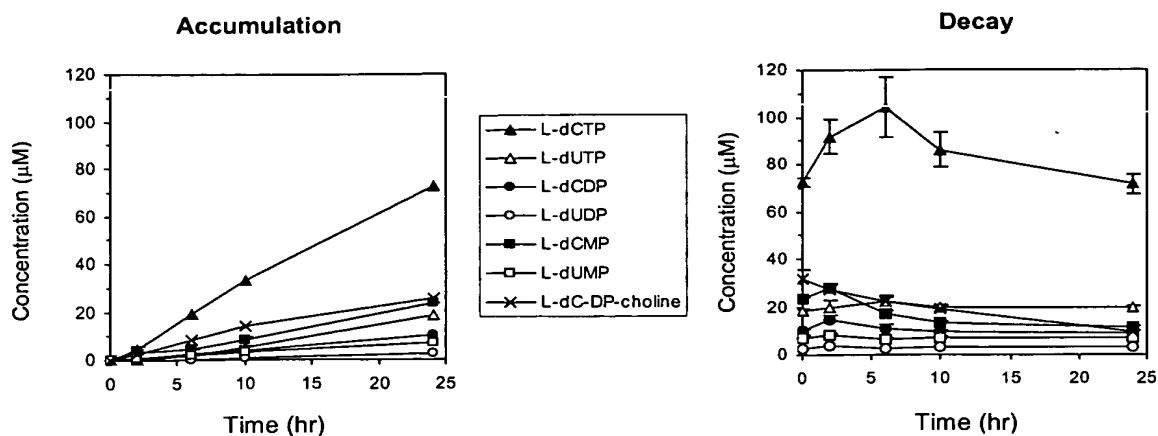
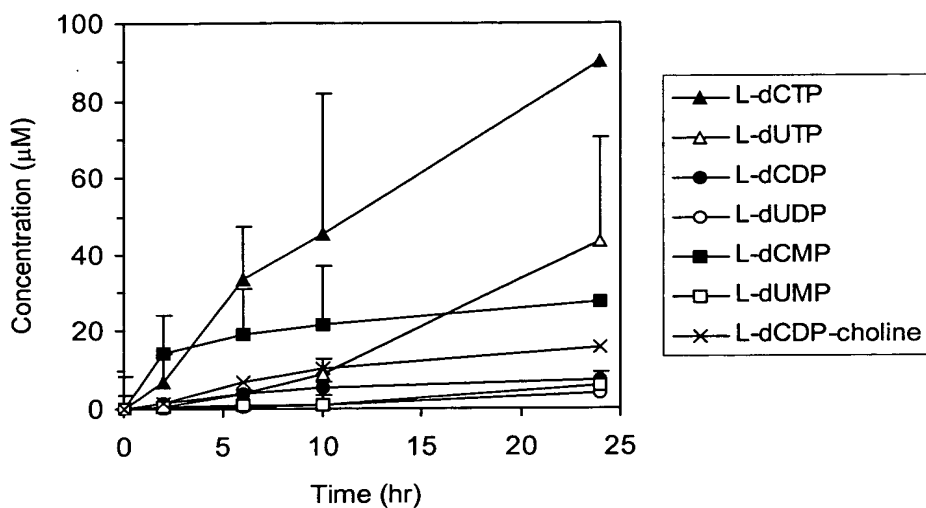


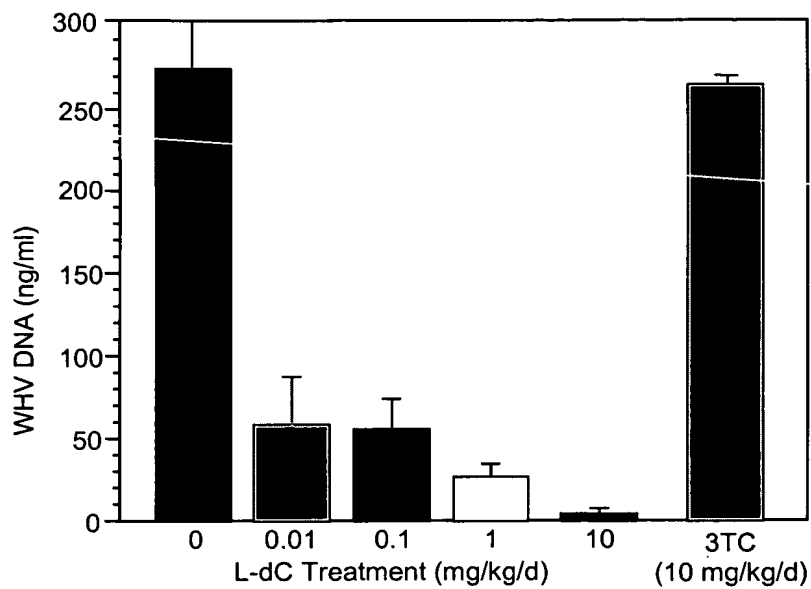
Figure 13 In Vitro Metabolism of 3',5'-Dival-L-dC in Human Plasma



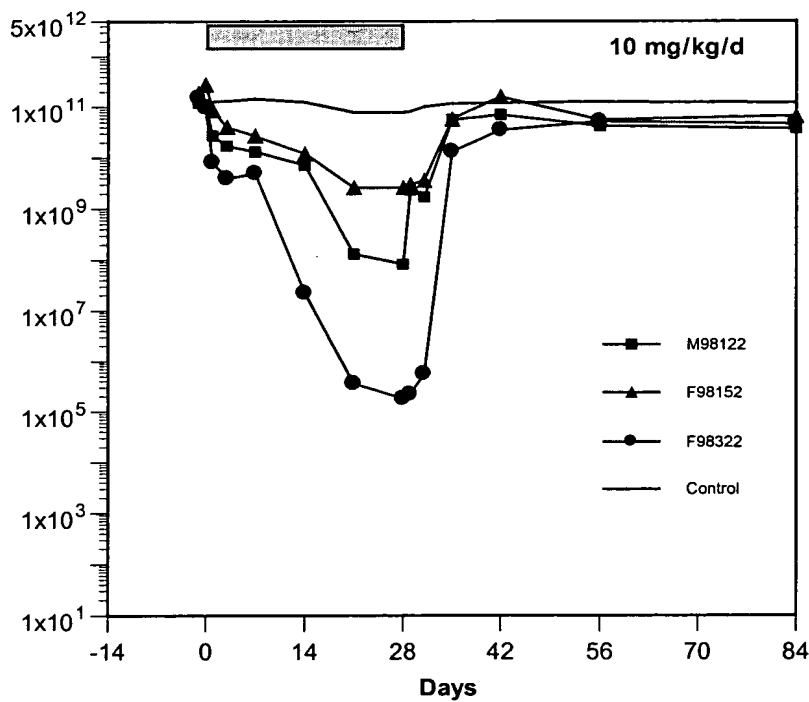
**Figure 14** Intracellular Metabolism of L-dC in HepG2 Cells



**Figure 15** Intracellular Metabolism of L-dC in Primary Human Hepatocytes



**Figure 16** Antiviral Dose Response of L-dC in the Woodchuck Model



**Figure 17** Antiviral Activity of L-dC in the Woodchuck Model

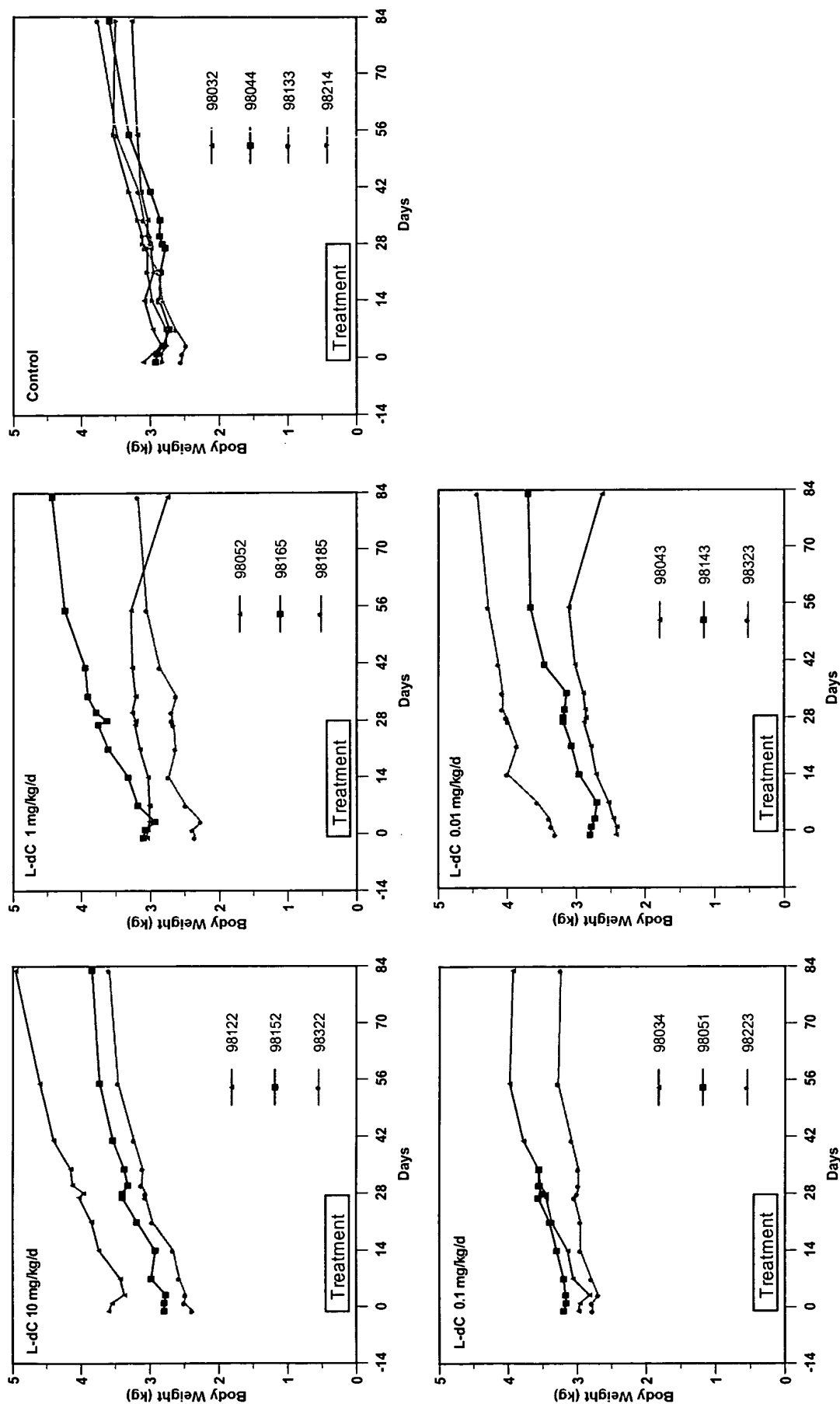
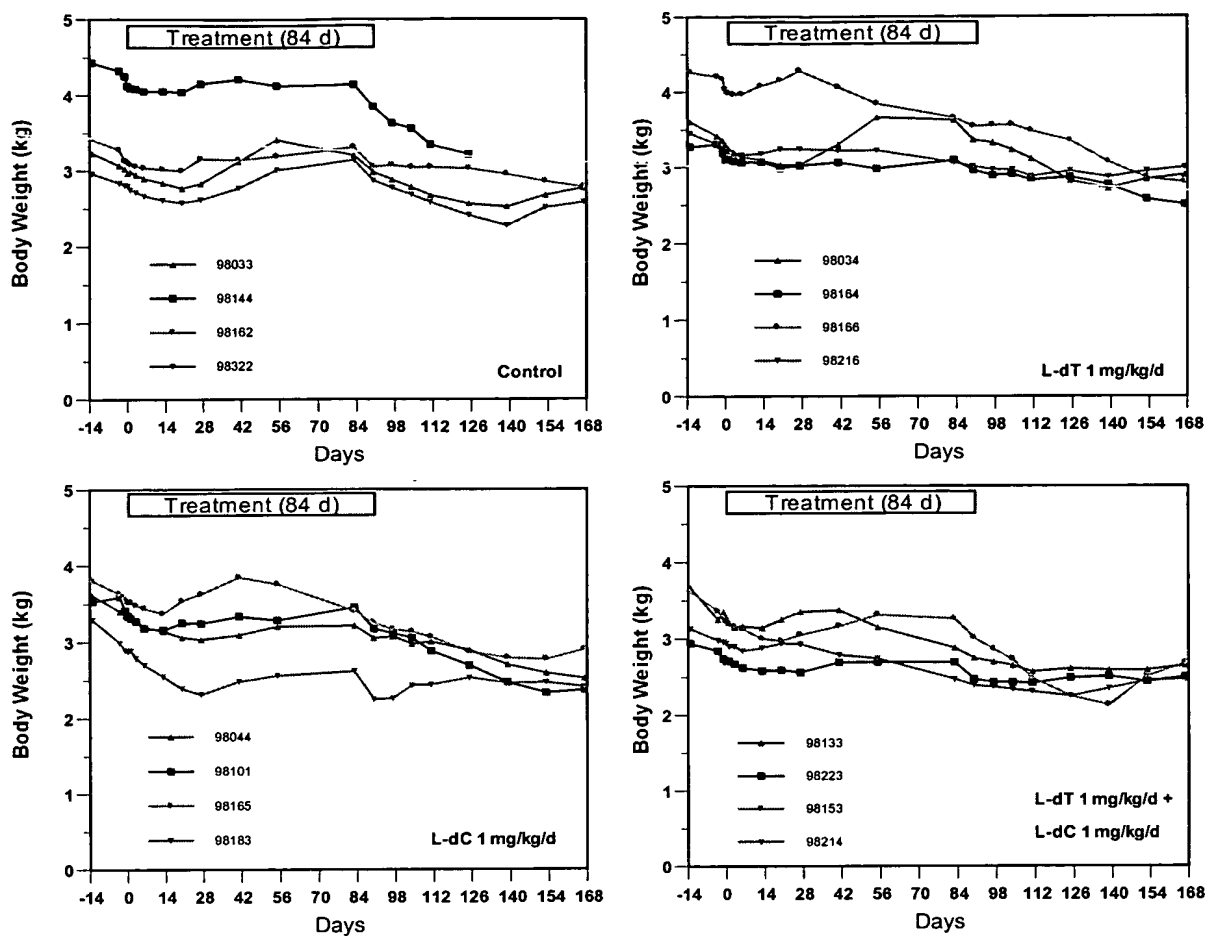


Figure 18 Body Weights of Woodchucks Orally Treated with L-dC – 28 Days



**Figure 19** Body Weights of Woodchucks Orally Treated with L-dC – 12 Weeks